

Amendments to the Specification:

Please amend the specification as follows:

Page 1, please replace the first two paragraphs as follows;

Location information service for a cellular telecommunications network

BACKGROUND OF THE INVENTION

Field of the invention

This invention relates to a location information service for a cellular telecommunications network, which enables individual mobile stations to receive information about their location within the network.

Background

Description of the Prior Art

A number of proposals have been made to locate the position of mobile stations within a cellular telecommunications network. Each cell of the network corresponds to a particular geographical area and the cells are provided with individual identification codes. Thus, when a mobile station communicates through a particular cell, a rough estimate of its geographical location can be obtained using the cell identity. In urban situations, the cells may have an approximate diameter of the order of 200-metresmeters.

Page 4, please replace the fifth and sixth paragraph as follows;

~~Detailed description~~

DETAILED DESCRIPTION OF THE INVENTION

Figure 1 illustrates a public land mobile network PLMN1 that provides a cellular mobile telecommunication service to mobile stations in the form of mobile handsets

MS1, MS2. The PLMN1 may be of any of the well known types such as GSM, DAMPS or UMTS and in the following description, a GSM network is described by way of example. The network is shown schematically that includes base transmitter stations BTS1, BTS2 which, as illustrated provide a radio link to the handsets MS1, MS2. PLMN 1 also includes base station controllers, mobile switching ~~centres~~ centers and a home location register as well known in the art. These features are not illustrated in the drawing and since they are very well known, will not be described further herein.

GSM networks support a short message service (SMS) by which text messages 25 can be communicated between mobile stations, in addition to the usual speech communication. In accordance with the invention, a SMS message ~~centre~~ center (SMSC) 10 is connected to the PLMN1 to process SMS messages concerning location requests and responses, as will be explained hereinafter. The SMSC 10 is connected to a location messaging server 11 with an associated location 36 database 12.

Page 5, please replace the first paragraph as follows:

Referring to Figure 2, the configuration of an individual cell associated with the base station controller BTS1 is shown schematically. The transmitter BTS1 has a usable range illustrated schematically by hatched outline 13. Thus, if the handset MS1 is communicating over a radio link with the network through BTS1, it is within the circular area 13 of the cell associated with BTS1. In accordance with the GSM Recommendations, each cell has an individual identity known to the network. In this example, the cell shown in Figure 2 has a cell identity C1. Thus, when the handset MS1 communicates with BTS1, the cell identity corresponds to a rough geographical location for the handset. Typically, in urban situations, the cell 13 has a radius of 100 ~~metres~~ meters. The actual cell size depends upon the configuration of the network and as well known in the art, the cellular dimensions are made smaller in regions of high population density and larger in rural areas. As shown in Figure 2, a distinctive landmark in the form of a church 14 - St. Mark's Church - is located within the cellular area 13.